UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MAR 30 2015

CERTIFIED MAIL #7009 1680 0000 7644 8338
RETURN RECEIPT REQUESTED

REPLY TO THE ATTENTION OF:

Mr. Brady Falk
Manager Safety and Facilities Engineering
Pentair Residential Filtration
20580 Enterprise Drive
Brookfield, Wisconsin 53008

Re: Notice of Violation
Compliance Evaluation Inspection
EPA ID No.: WID006078844

Dear Mr. Falk:

On September 12, 2012, a representative of the U.S. Environmental Protection Agency inspected the Pentair facility located in Brookfield. As a large quantity generator of hazardous waste, Pentair was subject to the Resource Conservation and Recovery Act, 42 U.S.C. § 6901 *et seq*. (RCRA). The purpose of the inspection was to evaluate Pentair's compliance with certain provisions of RCRA and its implementing regulations related to the generation, treatment and storage of hazardous waste. A copy of the inspection report is enclosed for your reference.

Based on information provided by Pentair, EPA's review of records pertaining to Pentair, and the inspector's observations, EPA has determined that Pentair has unlawfully stored hazardous waste without a license or interim status as a result of Pentair's violation of certain requirements for a license exemption under Wis. Admin. Code § NR 662.034(1)-(3). EPA has identified the license exemption requirement(s) violated by Pentair as of the date of the inspection in paragraphs 1- 2, below.

STORAGE OF HAZARDOUS WASTE WITHOUT A LICENSE OR INTERIM STATUS

At the time of the inspection, Pentair violated the following large quantity generator license exemption requirements:

1. Contingency Plan

Under Wis. Admin. Code § NR 662.034(1)(d) [40 C.F.R. § 262.34(a)(4)], a large quantity generator is required to have a contingency plan as described in 40 C.F.R. Part 265 Subpart D—Contingency Plan and Emergency Procedures. Each owner or operator must have a contingency plan for its facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned or non-sudden release of hazardous waste constituents to air, soil, or surface water. The plan

must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates. The contingency plan must describe the following arrangements with emergency organizations:

(i) Primary and support roles defined if multiple police and fire departments could respond to an emergency;

(ii) Police, fire, and emergency response teams are familiar with the site layout, hazards of the waste handled, places where personnel work, entrances and roads in the site and possible evacuation routes;

(iii) Agreements are made with emergency response contractors and equipment suppliers;

(iv) Local hospitals are familiar with the properties of wastes handled and the types of injuries or illnesses that could result from an emergency.

The contingency plan must include a list of emergency equipment function and locations. The contingency plan must be kept up to date.

At the time of the inspection, Pentair did not have a RCRA contingency plan. Elements of a RCRA contingency plan were present in an undated "Slug Control Program" submitted to the publicly owned treatment works (inspection report pages A-16 through A-19) and "In Case of Emergency Procedures" dated August 2003 (inspection report pages B-9 through B-15). In general, the RCRA contingency plan must minimize hazards posed by hazardous waste to employees and address protection of human health and the environment. Particular deficiencies included:

(i) Reliance on material safety and data sheets to determine hazards to the environment;

(ii) No emergency coordinator(s) named or their addresses, phone numbers (office and home);

(iii) No identification of the exact source, amount, and aerial extent of released materials;

(iv) No assessment of the need to evacuate local areas;

(v) No reporting to the National Response Center;

(vi) No provision for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a fire or explosion at the facility;

(vii) No mention of cleaning and putting away emergency equipment.

(viii) The emergency response local authorities are not named.

(ix) The plans had not been kept up to date.

With respect to (i) above, material safety sheets are appropriately used to identify workplace hazards from hazardous materials pursuant to Department of Labor Occupational Safety and Health Administration (OSHA) standards found at 29 CFR 1910, Subpart H. The concentrations of toxic contaminants subject to regulation by RCRA are orders of magnitude smaller than OSHA standards require to be identified. In other words, the material safety sheets may be used to identify a hazardous waste when a toxic contaminant is identified in the product. In contrast, the material safety sheets do not provide adequate information to eliminate the possibility that a toxic contaminant regulated by RCRA is present.

2. Personnel Training

Under Wis. Admin. Code § NR 662.034(1)(d) [40 C.F.R. § 262.34(a)(4)], a large quantity generator is required to complete a program of class-room instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of 40 C.F.R. Part 265. At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including where applicable:

(i) Procedures for using, inspecting, repairing, and replacing emergency and monitoring equipment;
(ii) Communications or alarm systems;
(iii) Response to fires or explosions;
(iv) Response to groundwater contamination incidents; and
(v) Shutdown of operations.

Facility personnel must successfully complete the training within six months after the date of their employment or assignment to a facility, or to a new position at the facility, whichever is later. Facility personnel must take part in an annual review of the initial training. The owner or operator must maintain documents and records at the facility.

At the time of the inspection, Pentair did not have a personnel training program. A sign-in sheet dated July 10, 2000 was provided as an example of previous training under the "Slug Control Program." The slug control program was required by an industrial user discharge permit, from the local publicly owned treatment works, that expired in February 2008.

At this time, EPA is not requiring Pentair to apply for a Wisconsin hazardous waste storage license so long as it immediately establishes compliance with the conditions for a license exemption outlined in paragraphs 1-2, above. With respect to paragraph 1 above, the building evacuation map with fire extinguisher locations was updated after the inspection. It is page D-4 of the enclosed inspection report. If drums are color-coded to distinguish hazardous waste from used oil or other contents, that information could be included in the contingency plan addressing emergency procedures and management of hazardous waste separately from nonhazardous waste. Finally, a representative of the State of Wisconsin, Department of Natural Resources inspected Pentair on January 24, 2013, identified the written contingency plan violation above, and returned Pentair to compliance on March 21, 2013. The Wisconsin inspector also noted, "facility had training," according to the national RCRA program information system.

After the Wisconsin Department of Natural Resources inspection, on September 3, 2014, Pentair notified the State of Wisconsin, Department of Natural Resources that its RCRA generator status had changed. Previously, Pentair was a large quantity generator and generated more than 1,000

kilograms of hazardous waste per calendar month. As of September 3, 2014, Pentair generates less than 1,000 kilograms and more than 100 kilograms of hazardous waste per calendar month making it a small quantity generator. Instead of the large quantity generator requirements cited in paragraphs 1 and 2, above, Pentair is now subject to the reduced requirements found specifically at Wis. Admin. Code § NR 662.192(1)(e)(4) [40 C.F.R. § 262.34(d)(5)]. The evacuation map (e.g., page D-4 of the inspection report) must be posted by telephones and include: the name and telephone number of the emergency coordinator; locations of spill control material, fire extinguishers, fire alarms; and the telephone number of the fire department unless Pentair maintains a direct alarm. Pentair must ensure that employees are familiar with waste handling and emergency procedures, relevant to their duties. The emergency coordinator must respond to emergencies that arise pursuant to Wis. Admin. Code § NR 662.192(1)(e)(4) [40 C.F.R. § 262.34(d)(5)(iv)].

According to Section 3008(a) of RCRA, EPA may issue an order assessing a civil penalty for any past or current violation, requiring compliance immediately or within a specified time period, or both. Although this letter is not such an order or a request for information under Section 3007 of RCRA, 42 U.S.C. § 6927, we request that you submit a response in writing to us no later than 30 days after receipt of this letter documenting the actions, if any, which you have taken since the inspection to establish compliance with the small quantity generator emergency coordinator and emergency response requirements in the paragraph above. You should submit your response to Ms. Sue Brauer, U.S. EPA, Region 5, 77 West Jackson Boulevard, LR-8J, Chicago, Illinois 60604.

If you have any questions regarding this letter, please contact Ms. Sue Brauer, of my staff, at (312) 353-6134 or at brauer.sue@epa.gov.

Sincerely,

Gary J. Victorine, Chief
RCRA Branch

Enclosure

cc: Randall Malek, WI DNR, Southeast Office (Randall.Malek@wisconsin.gov)
Michael Ellenbecker, WI DNR (Michael.Ellenbecker@wisconsin.gov)

U. S. Environmental Protection Agency
Region 5, Land and Chemicals Division
RCRA Branch
77 West Jackson Boulevard
Chicago, Illinois 60604

RCRA COMPLIANCE EVALUATION INSPECTION REPORT

SITE NAME:	Pentair
EPA ID NUMBER:	WID006078844
ADDRESS:	20580 ENTERPRISE AVE Brookfield, Wisconsin 53045
DATE OF INSPECTION:	September 12, 2012
EPA INSPECTOR:	Sue Rodenbeck Brauer Environmental Scientist

PREPARED BY: Sue Rodenbeck Brauer — Sept. 10, 2013

Sue Rodenbeck Brauer — Date
Compliance Section 2

ACCEPTED BY: _____ — 9/16/13

Julie Morris, Chief — Date
Compliance Section 2

Purpose of Inspection

This inspection was an evaluation of Pentair's compliance with hazardous waste regulations found at Wisconsin Administrative Code (WAC) Chapter NR Parts 660-679 and Title 40 of the Code of Federal Regulations (40 CFR), Parts 260-279. The state inspector was not present. The inspection was an EPA lead Resource Conservation and Recovery Act (RCRA) compliance evaluation inspection (CEI). According to RCRAInfo, the facility had not been inspected in five years. The site notified as a large quantity generator (LQG) of hazardous waste exhibiting the characteristic of toxicity for lead in 2009. In a 2002 notification, Pentair described generation of hazardous waste codes D008, F002, F003, F005, and U220.

Participants

Inspector(s):

Sue Rodenbeck Brauer, Environmental Scientist, EPA Region 5

Site Representative(s):

Bob Hintz, Manager Safety and Facilities Engineering, Pentair Water
Tom Stefan, Machine Repair/Maintenance, Pentair Water Treatment
Bob Linscott, Director of Operations
Gabe Chavez, EHS Manager (based in Delavan, Wisconsin)
Maggie Krull, Safety Manager
Mike Coleman, employee in water lab

Introduction

On September 12, 2012, I arrived at the site at approximately 9:25 a.m. Street views of the facility follow.

Picture #: P9110065
Date: 9/11/12, 9:31 a.m.
Photographer: Sue Brauer
Location: Pentair, WID 006078844
Subject: West end of building from car headed east.

Picture #: P9110066
Date: 9/11/12, 9:32 a.m.
Photographer: Sue Brauer
Location: Pentair, WID 006078844
Subject: East end of building, including sign and entrance. Pavement at the photo bottom was cropped.

I introduced myself, presented my U.S. EPA enforcement officer credentials, and exchanged business cards with Mr. Bob Hintz and Mr. Tom Stefan. I described the usual compliance evaluation inspection as consisting of a facility overview, site tour, and records review. Mr. Hintz provided me with a description of the site operations. Mr. Hintz led the tour. Mr. Hintz coordinated with other site representatives to obtain the documents requested for review.

I provided an EPA Small Business Resources information sheet and the Wisconsin Solid and Hazardous Waste Education Center tri-fold brochure to Mr. Hintz.

I informed Mr. Hintz that Pentair could claim any information gathered during the inspection as Confidential Business information including: verbal information, documents and photographs. Pentair did not make a CBI claim on the information gathered during the inspection.

Site Description

Following introductions, I asked for a description of facility history and operations. Mr. Hintz provided an evacuation map updated on May 3, 2010. Attachment A includes the map. Mr. Hintz has been with Pentair for 34 years. Mr. Tom Stefan has been with Pentair for 16 years. Three hundred twenty employees work two 10-hour shifts, from 6 a.m. to 4 p.m. and 4 p.m. to 2 a.m., Monday through Friday. The last two hours of the day are left in case overtime is needed. On Saturday, the shifts are 8 hours long, from 5 a.m. to 1 p.m. and 1 p.m. to 9 p.m. Thirty percent of the assembly area workers are temps. There was a jump in production in 2010.

This paragraph describing the laboratory (shown on facility map) contains information provided by Mr. Hintz. The lab is a water test lab in conjunction with a research lab. Pentair used to do some chemical research on their products. Pentair tests product life. Wastes generated in the lab include exchange resins generated by water treatment prior to reuse. Pentair experimented with ultra filtration of spent coolant from 2005-2008 and found it labor intensive.

Site Tour

The 2010 evacuation map shows a blocked doorway between the Assembly and Subassembly Areas. As pointed out by Mr. Hintz, this doorway is no longer blocked.

I observed manufacturing activities including machining brass, iron, and plastic into parts of whole house or point of use water filters, the final product. According to Mr. Hintz, the brass metalworking fluid[1] is managed as hazardous waste because the amount of reclaimable used oil is extremely small and because the liquid waste exhibits the hazardous characteristic of toxicity for lead, based on test results. The iron or steel cuttings and spent metalworking fluid are separated on-site, managed as nonhazardous, and recycled off-site. Dirty pig mats are managed in steel drums. Spent wipes from the tool room are managed as nonhazardous solid waste. Clean Harbors picks up the small number of drummed wastes generated on a milk run every two weeks.

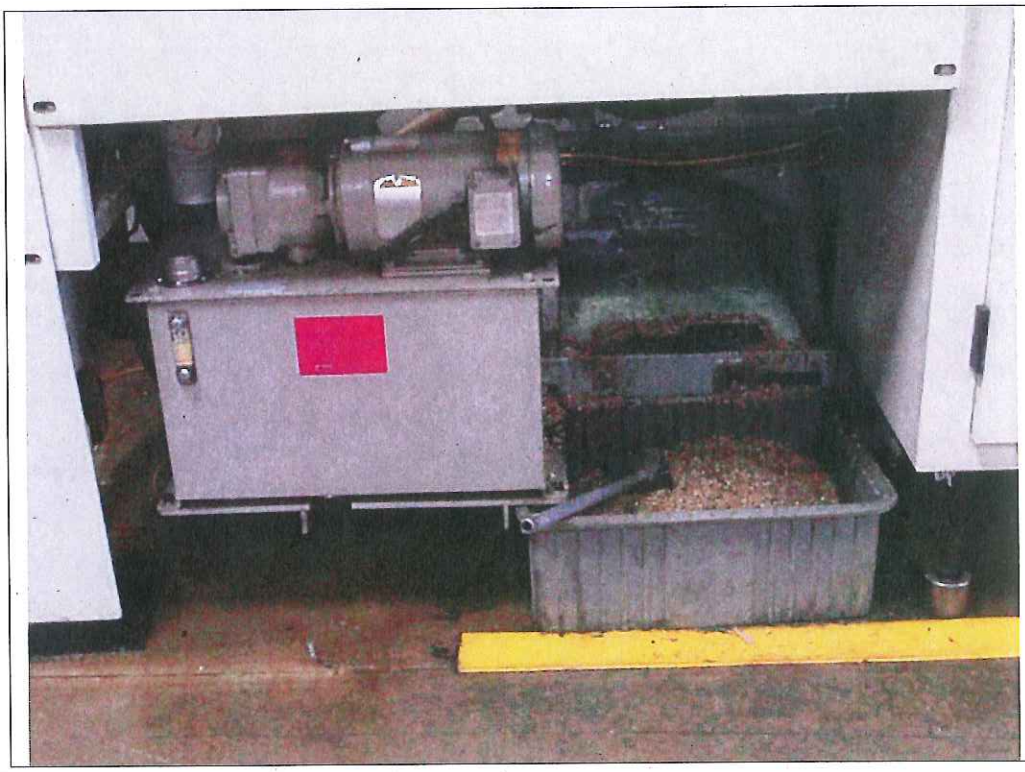


Photo #: P9110067
Date: 9/11/12 11:09 a.m.
Photographer: Sue Brauer
Location: Pentair WID 006078844, west side of the Supermarket area on site map.
Subject: Brass chips float and are conveyed to chip bin.

[1] EPA described "used oil" in the preamble to the "Burning of Waste Fuel and Used Oil Fuel in Boilers and Industrial Furnaces" final rule published in the Federal Register on November 29, 1985. "Used oils include the following: (a) Spent automotive lubricating oils (including car and truck engine oil), transmission fluid, brake fluid, and off-road engine oil; (2) spent industrial oils, including compressor, turbine, and bearing oils, hydraulic oils, metalworking oils, gear oils, electrical oils, refrigerator oils, and railroad draining; and (3) spent process oils" (50 FR 49174). In 1992, EPA stated in the preamble to the "Identification and Listing of Hazardous Waste; Recycled Used Oil Management Standards" final rule: "The only change is the inclusion of synthetic oils within the definition [of used oil]" (57 FR 41604, 9/10/1992). EPA had proposed to establish criteria of recyclability such as percent oil content but this was not finalized.

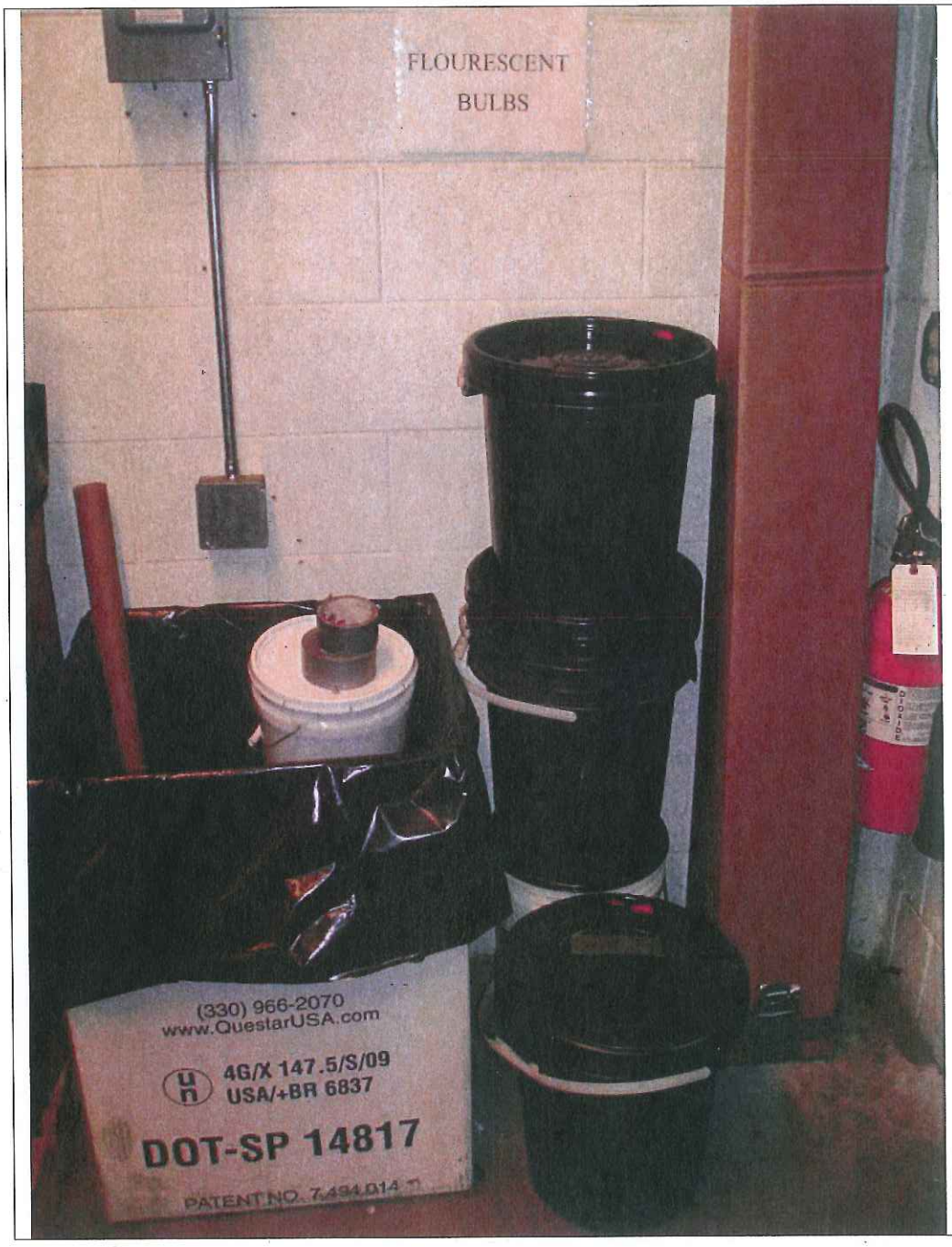
Picture : P9110068
Date: 9/11/12 11:10 a.m.
Photographer: Sue Brauer
Location: Pentair WID 006078844, west side of the Supermarket area on site map.
Subject: Brass cuttings are conveyed out of a metalworking machine fluid reservoir. Drips of metalworking fluid fall into the drum along with cuttings.

Picture #: P9110069
Date: 9/11/12, 11:11 a.m.
Photographer: Sue Brauer
Location: Pentair, WID006078844
Subject: This is the same machine as P9110068, slightly different exposure.

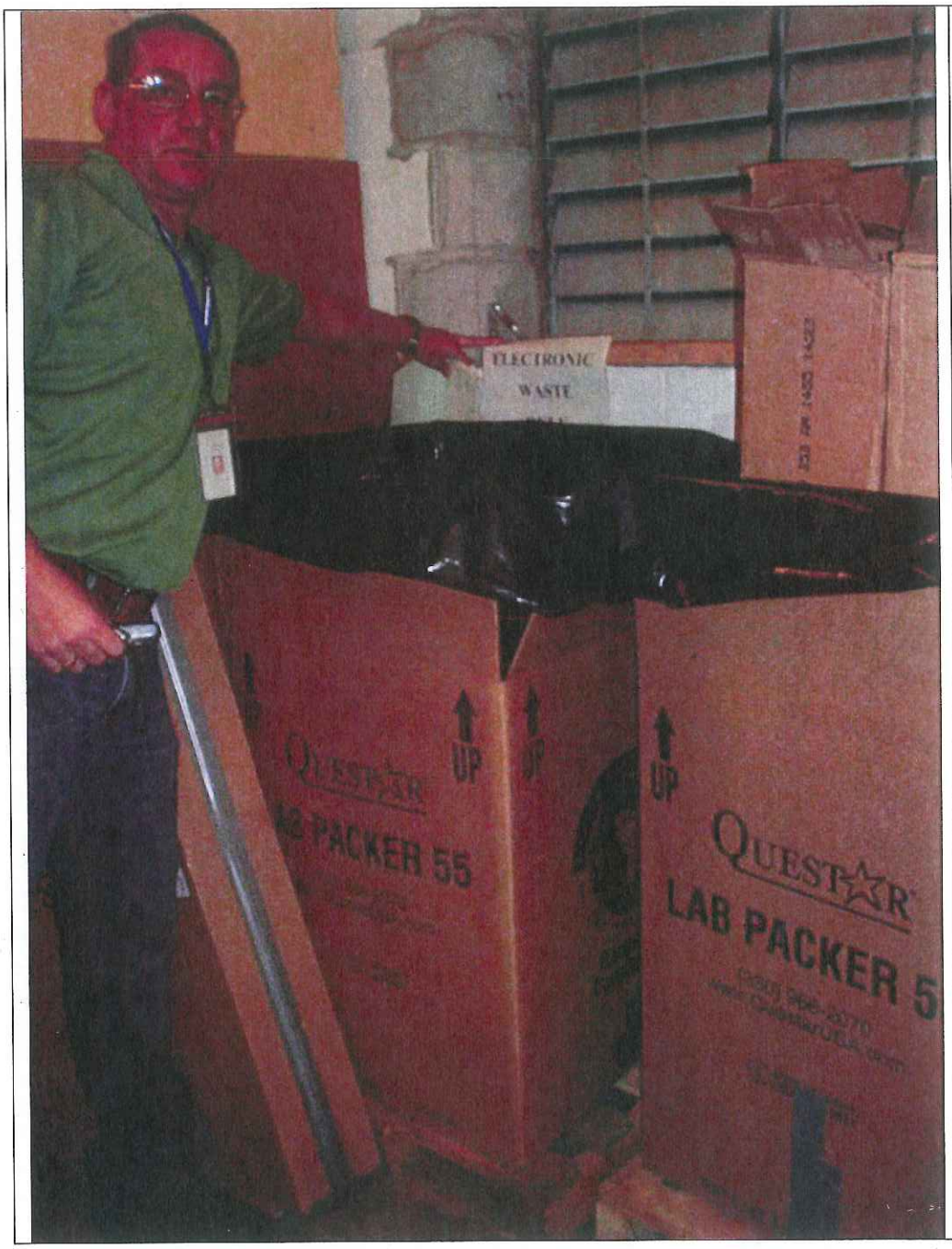
Picture #: P9110069 enlarged and cropped. The added black arrows help to distinguish two falling drops of metalworking fluid.

Picture #: P9110070
Date: 9/11/12 11:12 a.m.
Photographer: Sue Brauer
Location: Pentair WID006078844, west side of the Supermarket area on site map.
Subject: This is the drum marked #27 in the previous two photos. This drum receives brass chips and oil emulsion drips. I could not see a free-flowing phase of metalworking fluid in the drum. The drum was not labeled "used oil."

Picture #: P9110071
Date: 9/11/12 11:12 a.m.
Photographer: Sue Brauer
Location: Pentair, WID 006078844, west side of the Supermarket area on site map.
Subject: Many drops of metalworking fluid ride along the chip conveyor over the receiving drum (#27 shown in previous photos) of cuttings.

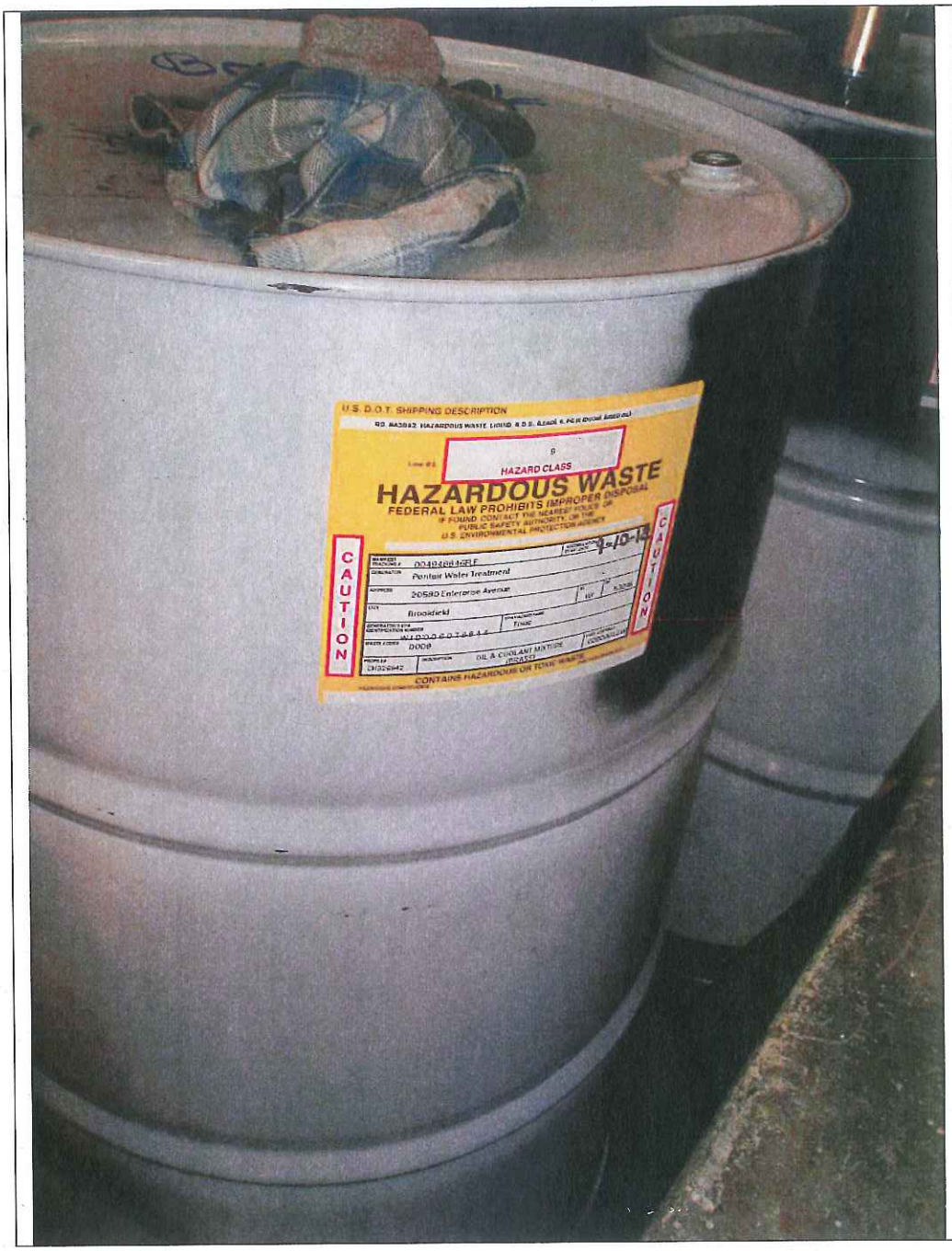


Picture #: 911072
Date: 9/11/12 11:13 a.m.
Photographer: Sue Brauer
Location: Pentair WID 006078844, small room adjacent to Supermarket and Subassembly areas on site map.
Subject: Universal waste fluorescent bulbs are stored in closed containers in a labeled location.

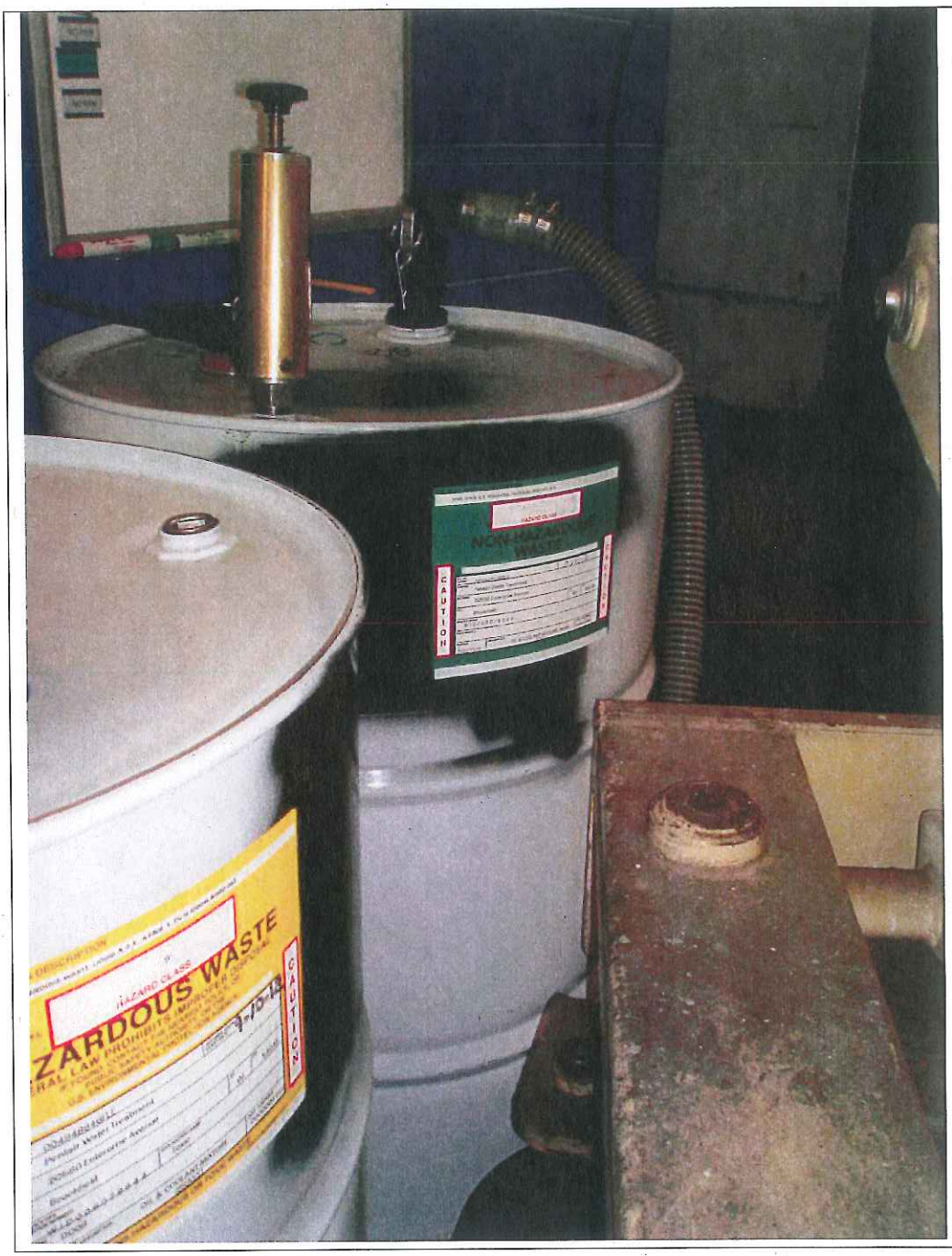


Picture #: P9110073
Date: 9/11/12 11:14 a.m.
Photographer: Sue Brauer
Location: Pentair WID 006078844, small room adjacent to Supermarket and Subassembly areas on site map.
Subject: Electronic waste is managed as universal waste. One box used for universal waste fluorescent tubes is open at the end. See the box flaps at the upper right edge of this photo. Mr. Bob Hintz is pictured.

Picture #: P9110074
Date: 9/11/12 11:17 a.m.
Photographer: Sue Brauer
Location: Pentair, WID 006078844 Subassembly Area
Subject: Product methylene chloride solvent management practice.

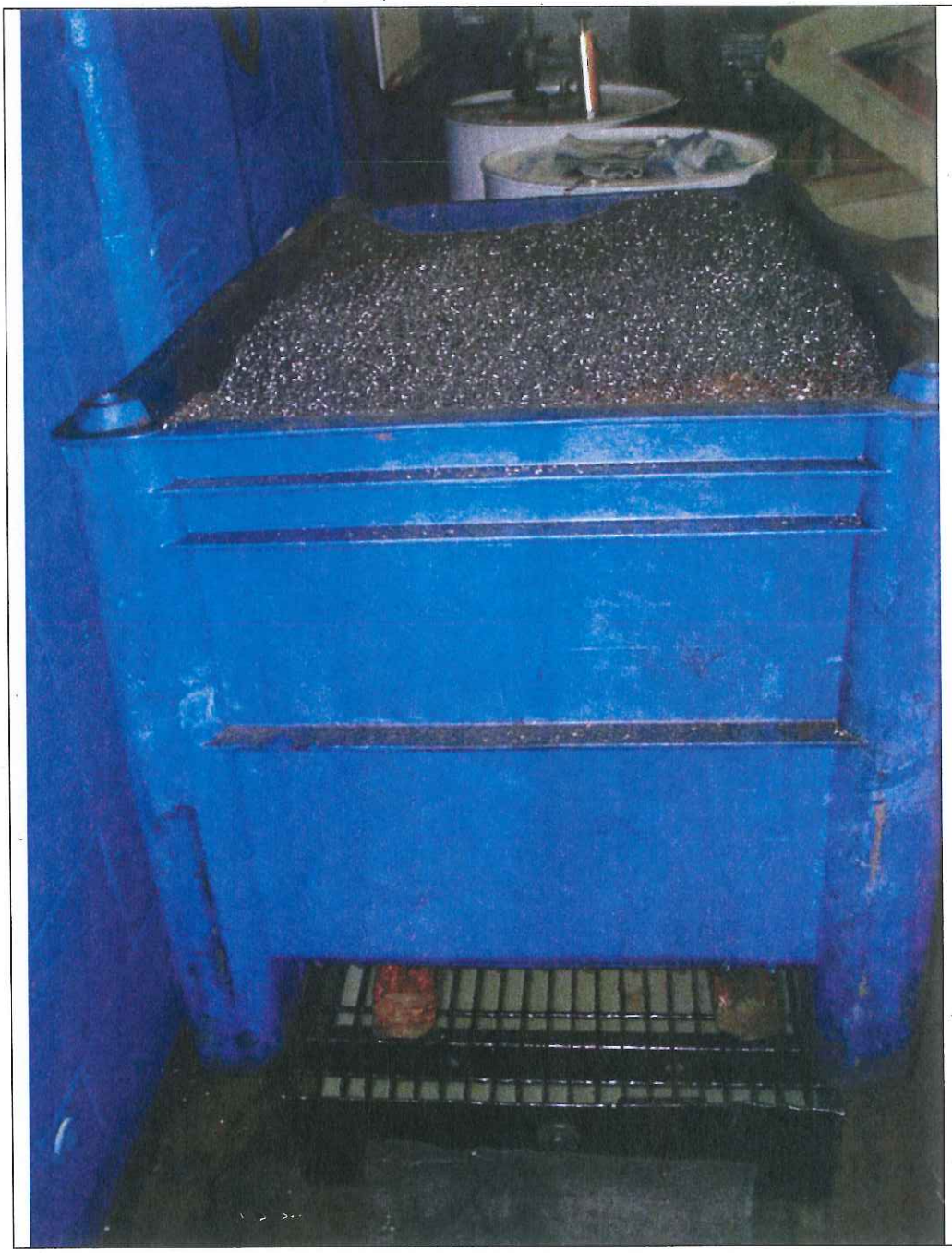


Picture #: P9110075
Date: 9/11/12 11:24 a.m.
Photographer: Sue Brauer
Location: Pentair, WID 006078844, in Machine Shop on site map.
Subject: This drum of Hazardous waste is labeled with the manifest number, 004948846 FLE. The accumulation period began on 9/10/12. The contents are oil and coolant (brass) and identified with hazardous waste code D008.



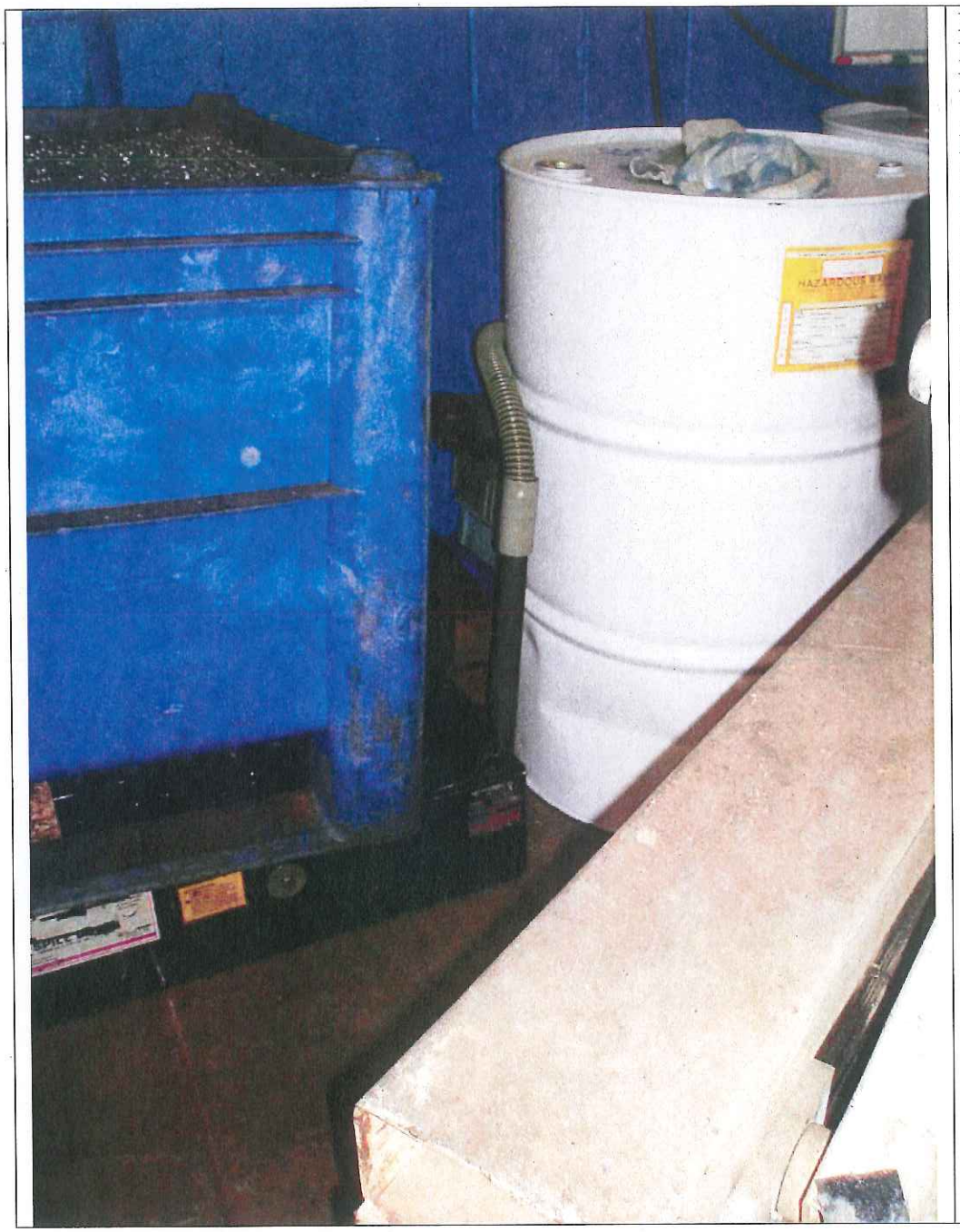
Picture #: P9110076
Date: 9/11/12 11:24 a.m.
Photographer: Sue Brauer
Location: Pentair, WID 006078844, in Machine Shop on site map.
Subject: This drum contains spent metalworking fluid from iron or steel cuttings. It is labeled "Non-hazardous waste." The gray hose connected to the drum bung hole is part of the cuttings draining system. The other drum attachment connects to a plant vacuum line. The drum to the left was the subject in photo P9110075. A man lift (lower right of photo) was here for lighting tube replacement.

Picture #: P9110077
Date: 9/11/12, 11:25 a.m.
Photographer: Sue Brauer
Location: Pentair, WID 006078844, Machine shop area on site map.
Subject: The blue tote has a capacity of about 400 gallons. Pentair uses gravity to physically separate metalworking fluid from the cuttings in it. It is stored over containment with absorbent pads available for transfer spills.



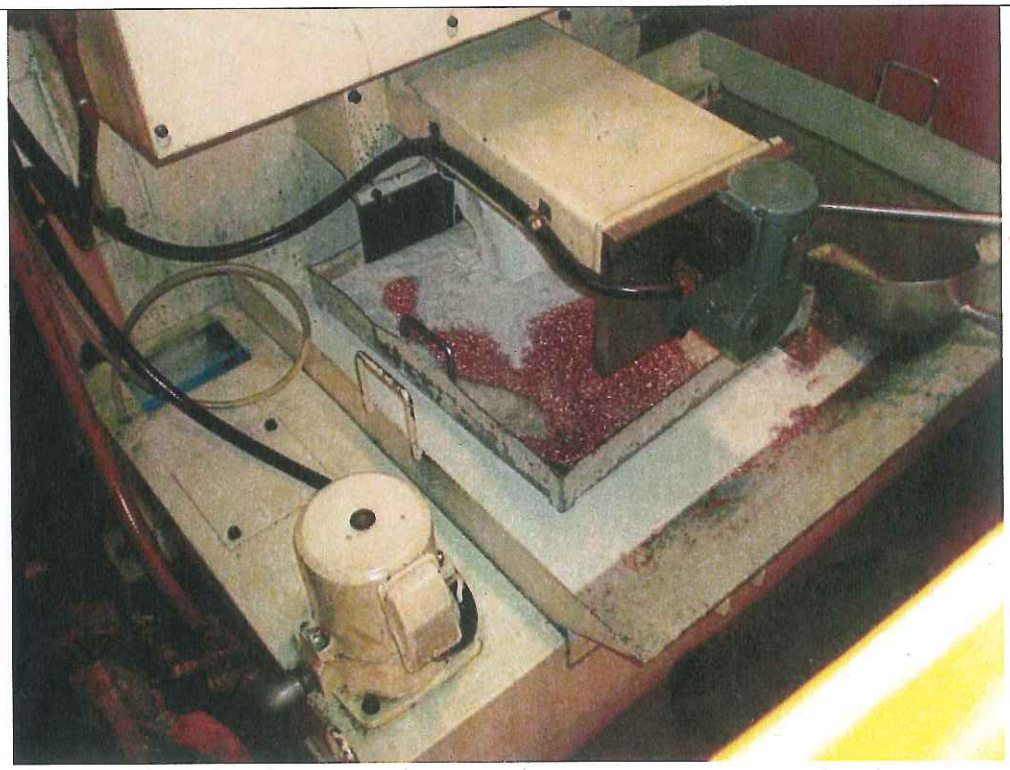
Picture #: P9110078
Date: 9/11/12, 11:26 a.m.
Photographer: Sue Brauer
Location: Pentair, WID 006078844, machine shop area on site map.
Subject: This is an overview of the cuttings draining area looking east. The blue tote of cuttings is the same tote as in P9110077. The drums of spent metalworking fluid were in photos P9110075 and P9110076. According to Pentair staff, it takes about three days to fill this tote with cuttings. It drains for 24 hours.

Picture #: cropped from P9110079
Date: 9/11/12, 11:27 a.m.
Photographer: Sue Brauer
Location: Pentair, WID 006078844, Machine Shop area on site map.
Subject: The gray piping from the right front corner of the modular spill basin was connected to the nonhazardous waste drum seen in P9110076.



Picture #: P9110080
Date: 9/11/12, 11:27 a.m.
Photographer: Sue Brauer
Location: Pentair, WID 006078844, machine shop on site map.
Subject: Better photo of spent metalworking fluid piping from iron or steel cuttings to drums than in P9110079. Man lift in bottom right of picture.

Picture #: P9110081
Date: 9/11/12, 11:28 a.m.
Photographer: Sue Brauer
Location: Pentair, WID 006078844
Subject: Overview of chip barrel draining area looking north. Removal of oil from basin below the tote ("barrel" on sign) is by building vacuum. Note the black hoses attaching vacuum system pipe on wall to drums.



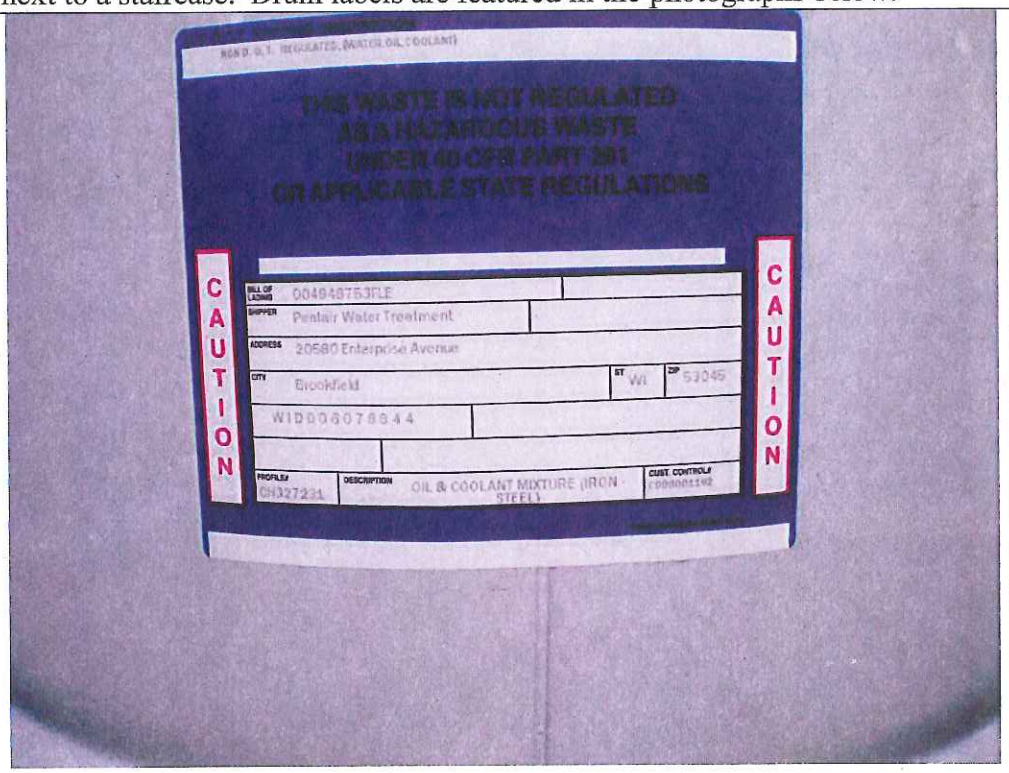
Picture #: P911082
Date: 9/11/12, 11:35 a.m.
Photographer: Sue Brauer
Location: Pentair, WID 006078844, machine shop on site map.
Subject: Brass metalworking fluid, an emulsion coolant, is shown here. The cuttings are removed a couple of times per shift according to Pentair staff.

Moving on from the Machine Shop, the tool room is located in the southwest corner of the building. There are four computer numerical control (CNC) machines in the tool room. The coolant for these machines contains triethanolamine. I observed a container of product lye cleaner and was told that it is used on the 3-D printer. Corrosion on machine tools is removed by blasting, generating blasting dust. The dust is managed with garbage.

In the water lab (location on site map), employee Mike Coleman described using hydrochloric acid, sodium hydroxide, potassium permanganate, and chlorine in compatibility testing for materials in Pentair products. Dilute spent chemicals are disposed to a laboratory sink and sewered. The laboratory tests flow rates and for failures. There is a holding tank under the floor for water reuse. The facility uses 300 gallons per minute of water according to Mike.

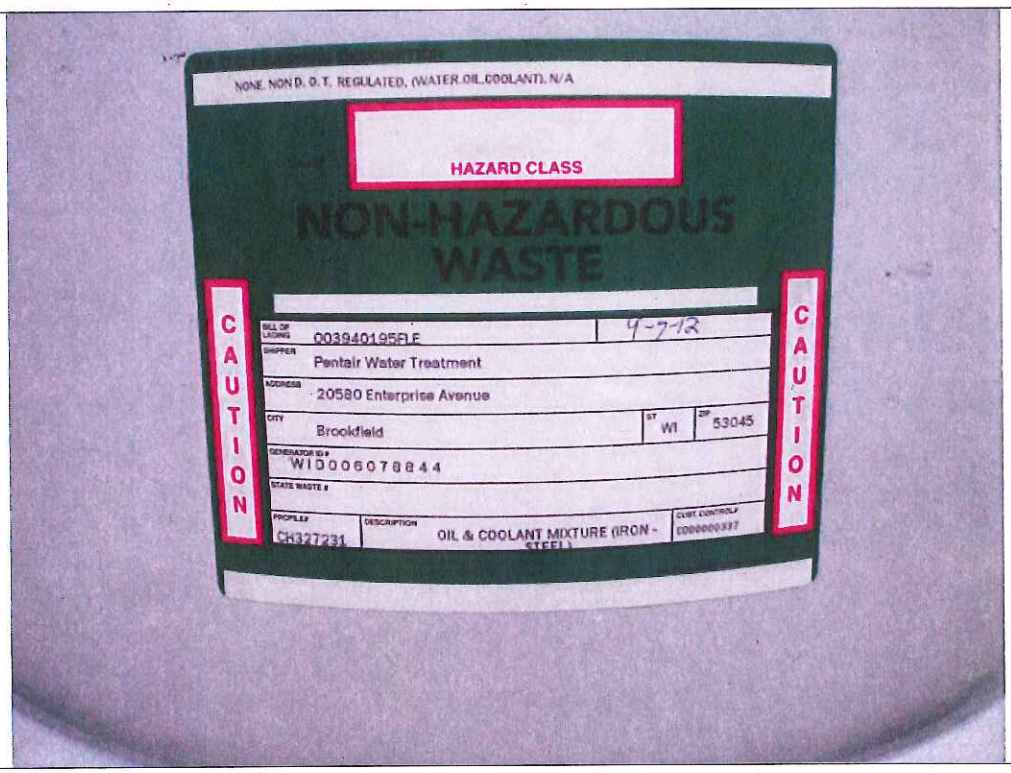
A detergent is used in an aqueous wash on cast iron. This is a nonhazardous liquid waste according to Pentair staff.

The ninety-day generator waste accumulation area is along a south wall of the Machine Shop next to a staircase. Drum labels are featured in the photographs below.

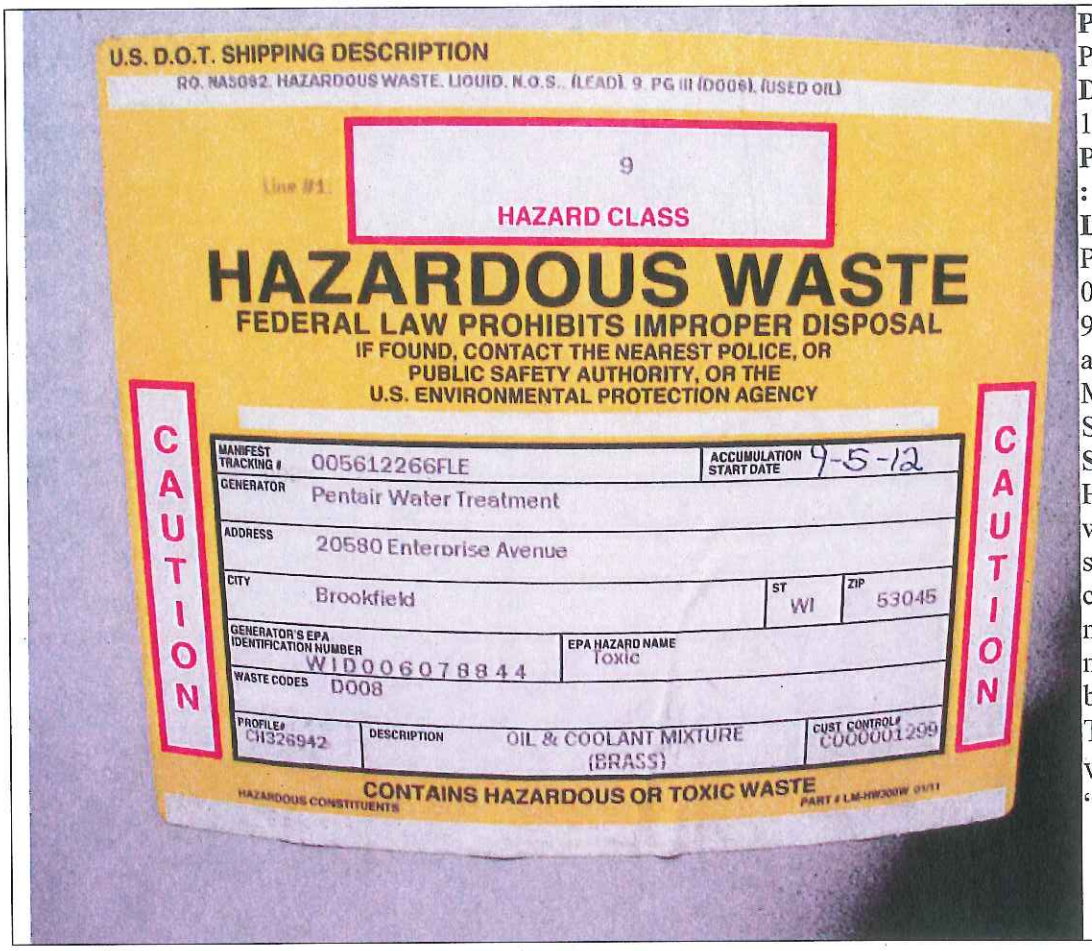


Picture #: P9110083
Date: 9/11/12, 11:43 a.m.
Photographer: Sue Brauer
Location: Pentair, WID 006078844, Machine Shop, 90-day storage area
Subject: Spent metalworking fluid (water, oil, coolants) is labeled nonhazardous. The description clarifies that the coolant mixture is from machining "iron-steel."

Picture #: P9110084
Date: 9/11/12
Photographer: Sue Brauer
Location: Pentair, WID 006078844
Subject: Same drum as in P911084, with surroundings to establish location.



Picture #: P9110085
Date: 9/11/12
Photographer: Sue Brauer
Location: Pentair, WID 006078844
Subject: Same nonhazardous wastestream profile # as in P9110084 but different style label.



Picture #: P9110086
Date: 9/11/12, 11:43 a.m.
Photographer: Sue Brauer
Location: Pentair, WID 006078844, 90-day storage area in Machine Shop.
Subject: Hazardous waste label for spent oil and coolant mixture from machining brass parts. The drum top was marked "full 9/10."

Photographs of documents are included in Attachment B.

Records Review

I obtained a list of wastes and Clean Harbors profile numbers from Mr. Hintz. I reviewed waste profiles/characterizations, waste analysis records, manifests, land disposal restriction notification (LDR) forms, weekly container inspection logs, and requested the contingency plan. Several of these documents are included in Attachment A and Attachment B, Photographs.

I completed a Wisconsin Department of Natural Resources large quantity generator checklist, including Land Disposal Restriction requirements, during the records review, *see* Attachment C.

During manifest review, I saw that multiple transporters shipped the waste before it reached the final treatment, storage, and /or disposal facility. The following table captures some of this information.

Manifest #	Date Pentair signed	Date Transporter signed	Date received TSDF	Waste	CH Profile #
004893597	01/12/12	01/12/12 01/20/12	1/22/12	D008 U.O. D008 solid	CH326942 CH327243

Manifest #	Date Pentair signed	Date Transporter signed	Date received TSDF	Waste	CH Profile #
004893596	01/12/12	01/12/12	1/30/12	Oil and coolant mixture (iron – steel)	CH327231
004893598	01/12/12	01/12/12	2/2/12	CPUs, laptops, circuit boards	CH474943
004893772	01/26/12	01/26/12 02/02/12	2/6/12	D008 U.O. Nonhaz. det.	CH326942 CH327412
774004518 004893773	01/26/12	01/26/12	2/20/12 NCD000648451 Clean Harbors, Reidsville, NC	8' fluorescent tubes E waste	CH474963
005231384	02/09/12	02/09/12 02/15/12	2/20/12 ARD069748192 Clean Harbors, El Dorado, Arkansas	D008 U.O. Aq.wash Fluor. lamps HID bulbs	CH326942 CH327412 CH474963 CH485998
004948846	02/23/11	02/23/11 03/02/11	03/05/12 ARD069748192	D008 U.O. Aq. wash	CH326942 CH327412
005231657	03/08/12	03/08/12 03/13/12 03/15/12	03/__/12 illegible	D008 U.O. Aq. wash	CH326942 CH327412
005231656	03/08/12	03/08/12* 03/13/12* 03/20/12* 03/22/12+	03/23/12 TND982141302	D008 U.O.	CH326942
005231658	03/08/12	03/08/12* 03/15/12* 03/22/12+	04/03/12	CPUs, laptops, circuit boards	CH474943
005228892	03/22/12	03/22/12 03/30/12^ 04/01/12* 04/03/12*	04/04/12 ARD069748192	D008 U.O. Aq. wash	CH326942 CH327412
005216001	04/12/12	04/12/12 04/20/12 04/25/12 04/29/12	4/29/12 ARD069748192	UW batteries D008 U.O. D008 UO absorbents	CH474946 or 8 CH326942 CH327243
005216002	04/12/12	04/12/12* 04/19/12* 04/25/12* 04/26/12+	04/29/12 ARD069748192	CPUs, laptops, circuit boards	CH474943
005216000	04/12/12	04/12/12	04/27/12	Oil and coolant mixture (iron – steel)	CH327231
005216145	04/26/12	04/26/12 05/04/12	05/09/12	D008 U.O.	CH326942
005216296	05/10/12	05/10/12 05/16/12 05/18/12 05/20/12	05/20/12	D008 U.O.	CH326942

Manifest #	Date Pentair signed	Date Transporter signed	Date received TSDF	Waste	CH Profile #
005216297	05/10/12	05/10/12 05/16/12 05/17/12 05/21/12	05/22/12	Oil and coolant mixture (iron – steel)	CH327231
005611919	05/24/12	05/24/12 06/01/12 06/04/12 06/06/12	06/06/12	D008 U.O. Aq. Wash	CH326942 CH327412
005611920	05/24/12	05/24/12 05/31/12 06/05/12 06/06/12	06/07/12	CPUs, laptops, circuit boards	CH474943
005611921	05/24/12	05/24/12 05/31/12	06/05/12	Batteries cont. KOH solid electric storage Li batt lab pk	CH474946? CH474948?
005612116	06/14/12	06/14/12 06/19/12 06/21/12 06/26/12	06/26/12 ARD069748192	D008 U.O. Aq. Wash Fluor. lamps	CH326942 CH327412 CH474963
005612117	06/14/12	06/14/12 06/19/12 06/21/12 06/26/12	06/26/12 OHD000816620	D008 U.O. Aq. wash	CH326942 CH327412
005612115	6/14/12	06/14/12 06/21/12 06/29/12	06/29/12	Non-PCB ballasts	CH474982
005317427	6/28/12	06/28/12 07/06/12 07/09/12 07/15/12	07/15/12	D001, D002,U080, U154, U220 D002 Waste paint-related Waste battery fluid	
005612267 Bill of Lading				Aq. wash Waste elec.	CH327412 Not noted
005612266	06/28/12	06/28/.12 07/06/12 07/09/12 07/15/12	07/15/12	D008 U.O.	CH326942

*MAD039322250, Clean Harbors Environmental Services Inc., Norwell, MA
+ALD067138891, Robbie D. Wood, Hueytown, AL
^OKD981588791, Triad Transport, McAlester, OK

The wastestreams in the following table were observed during the site tour.

Waste Stream Identified	Waste Management Practice Noted	Clean Harbors Waste Profile Number (p. A-3)	Generation Rate (from notes)	Waste Analysis (from notes)
Spent brass metalworking fluid	D008	CH32694	49 x 55 gal. drums/6 months	S-K 12/08/97
Spent iron-steel metalworking fluid	Nonhazardous	CH327231	5 x 55 gal. drums/6 months	
Metal cuttings (brass, iron-steel)	Exempt scrap metal	Received by Honigman scrap metal	No data reviewed	
Tool room coolant (w/triethanolamine)	Noted at machine point of generation	CH32694	Included above with iron-steel or brass?	1997 BTU, pH, nonvolatile residue
Absorbent mats	D008	CH327243	2 x 55 gal. drums/6 months	Environmental Solutions, Inc. May 1998
Spent wipes	Nonhazardous and U080, circumstance dependant	None	1 x 5 gal. drum/6 months	EOG Environmental 2002
Tool blasting dust	Nonhazardous	None	No data reviewed	
Lab wastes (HCl, NaOH, $KMnO_4$, Cl)	Dilute and sewer	None	no records	
Aqueous parts cleaner	Noted only in records	CH327412	11 x 55 gal. drum/6 months	Heritage-Crystal Clean,
"Waste oil" (used straight oil)	Noted only in records	NA	Not reviewed	Heritage-Crystal Clean, Cl below detection limit; S-K 2011, off spec for As
Discarded computer equipment (recycle)	Texas outs19h	CH474943	10 CF & 137 lbs./ 6 months	Precious metal recycling

Mr. Hintz provided copies of the documents listed below for Attachment A and in Attachment B, photos. In particular, Pentair provided its "In Case of Emergency" plan (called an Emergency Action Plan in Attachment B) in response to my request for the RCRA Contingency Plan.

Also, Mr. Hintz also provided Pentair's Slug Program when we discussed waste minimization. Mr. Hintz mentioned the use of a "5 S" management approach that encourages employee 'ownership' and responsibility for maintenance of an employee's equipment or area.

Mr. Hintz discussed an emergency situation in 2001 that lead to changes in materials management at Pentair. Methylene chloride and oil were released from a corroded drum. Mr. Hintz reviewed his spill report that recorded the sequence of events. According to Mr. Hintz, Pentair switched from its practice of using plain steel drums to resin-coated steel drums and allows smaller volumes of waste to accumulate on-site as a result of the 2001 spill.

I observed some recordkeeping issues, primarily that there is not a RCRA Contingency Plan. Analyses were not available for all wastestreams. Some waste characterizations were based on the composition of the unused product apparently without consideration of potential physical or chemical contamination during use. Furthermore, the knowledge of product composition was limited to the Material Safety Data Sheet, which prior to Global Harmonization, reported chemicals present down to concentrations of 1 percent or 0.1 percent for carcinogens. The concentration thresholds for toxicity characteristic concentrations are orders of magnitude below 0.1 percent.

Closing Conference

I told Mr. Hintz and Mr. Stefan that they probably could manage the spent metalworking fluid as "used oil" because there is not a regulatory definition of "recyclable." EPA used a presumption of recyclability in the 1992 used oil management standards final rule instead of promulgating recyclability criteria such as water content. Mr. Hintz and Mr. Stefan had been encouraged by a Safety-Kleen representative (Kelly), to manage the spent brass metalworking fluid as a waste.

The most significant regulatory concern was the absence of RCRA Personnel Training and a RCRA Hazardous Waste Contingency Plan. Components of a plan were present such as the evacuation map with fire extinguisher locations. The inspection concluded after 4:00 PM.

Post-Inspection

Prior to completion of this inspection report, Mr. Hintz provided me with the phase state of an analyzed waste sample and updated emergency evacuation map/signs. These documents are located in Appendix D.

Attachments

A. Documents Received While On-Site
    1. Evacuation Map (used as site map), 11" x 17," 1 p.
    2. Clean Harbors Online Services Pentair Water Treatment Profiles, 1 p.
    3. Analytical results for "Used Sorbents" sampled 5/4/98, 1 p.
    4. Analytical report dated 8/2/07 for sample collected 5/20/07, 9 pp.
    5. Fleck Controls/Pentair Water Treatment "Slug Control Program," 5 p.
B. Photographs and Log
C. Checklist(s)
D. Post-Inspection Documents
    1. Email dated 9/13/2012 from Bob Hintz to Sue Brauer regarding phase of sample.
    2. Email dated 9/20/2012 from Bob Hintz to Sue Brauer regarding new Pentair evacuation sign

ATTACHMENT A
Documents Received While On-Site

Pentair
Water Treatment

FLECK

BUILDING EVACUATION!

1. Use any EXTERNAL door neare your current location.
2. Meet your evacuation team i colored areas immediately!
3. Wait for head count.
4. Proceed to final meeting loc

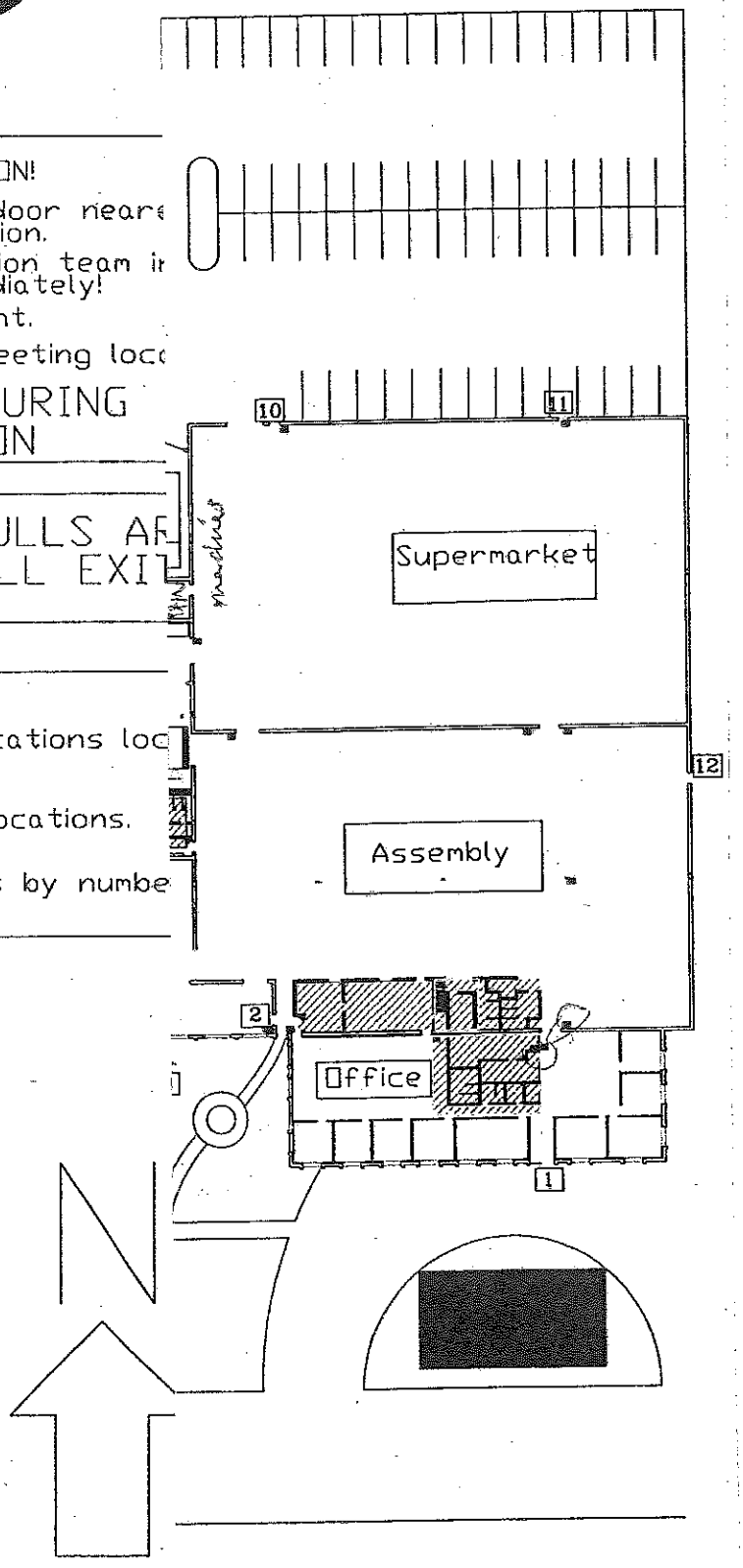
NO SMOKING DURING EVACUATION

FIRE ALARM PULLS AR LOCATED AT ALL EXI

KEY

- Severe weather locations loc on inside walls.
- Fire extinguisher locations.
- 7 Exit door locations by numbe

Updated May 3, 2010



Fax received
9/12/12

Pentair
Water Treatment

FLECK

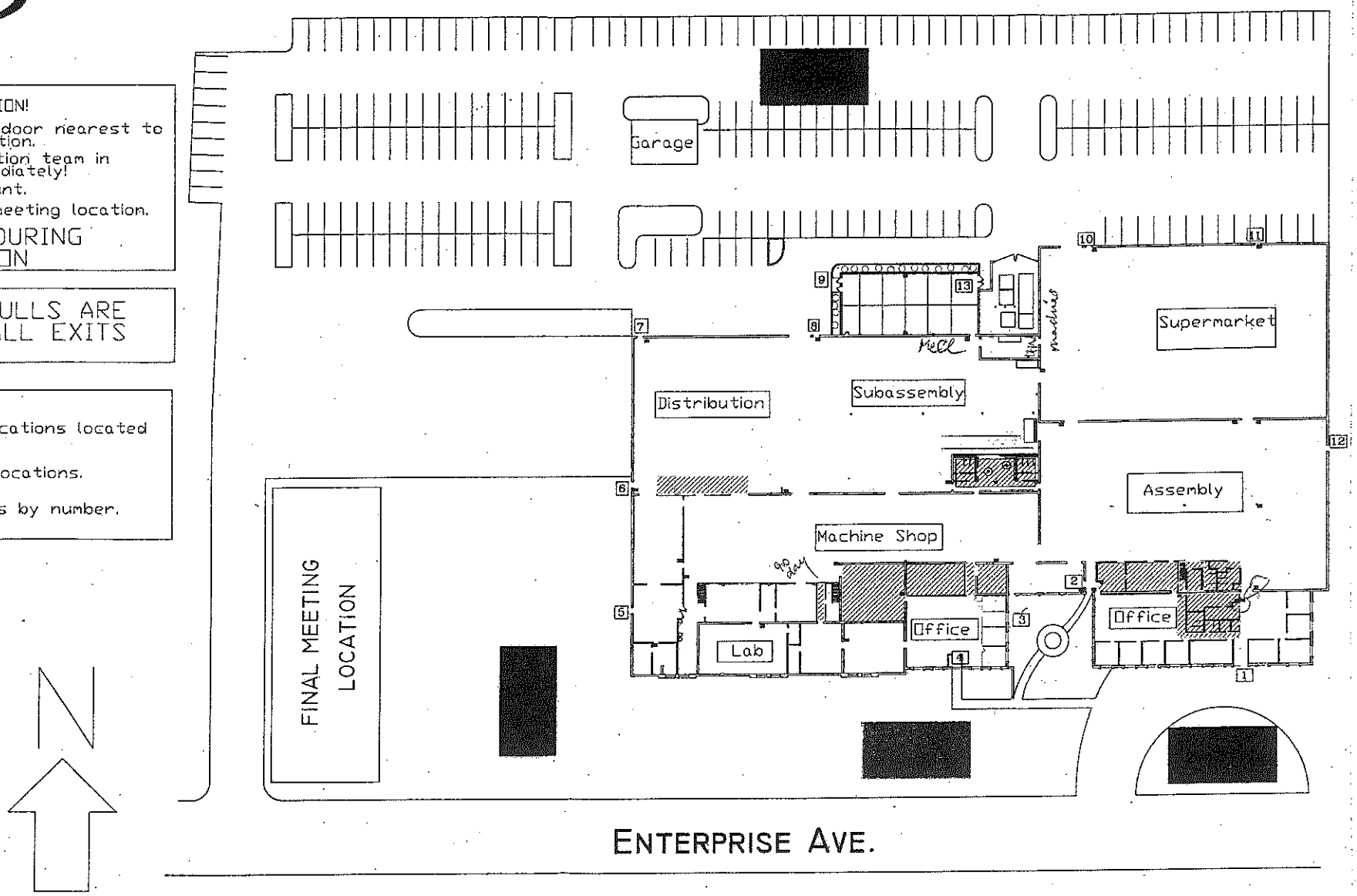
EVACUATION MAP

DING EVACUATION!
ny EXTERNAL door nearest to current location.
your evacuation team in d areas immediately!
for head count.
ed to final meeting location.
SMOKING DURING EVACUATION

ALARM PULLS ARE TED AT ALL EXITS

KEY
e weather locations located side walls.
extinguisher locations.
door locations by number.

May 3, 2010



A-1

A-2

Sue received
9/12/12

PE3092

Pentair Water Treatment
20580 Enterprise Avenue
Brookfield, WI 53045 US
EPA ID: WID006078844

CleanHarbors

Clean Harbors Online Services

Home | View/Select Generators | Waste Inventory | **Profiles** | Rolloff | Drum Requests | Reports

Profile

Log Off | Help

CHI Profile Number: | Generator: | Description: | Profile Count: 0

Search Profiles

Search Options

New Profile

Search by

Customer Name: Pentair Water Treatment Customer Code: PE3092

Generator Name: Pentair Water Treatment Generator Code: PE3092

Profile:

Show profiles with status

☑ Approved ☑ Tentative ☑ Deadfiled ☑ Incomplete

☑ Expired ☑ Submitted ☑ Pending ☑ Review

Show 25 Profiles Per Page.

View	Edit	Copy	Recertify	Profile #	Description	Waste Classification Code	Expiration Date	Approval Status
View	Edit	Copy	Recertify	CH474950	Alkaline Batteries For Reclamation (Mercury Free)	LBD1	11/16/2012 12:00:00 AM	Approved
View	Edit	Copy	Recertify	CH327412	AQUEOUS PARTS WASHER WASTE	A22K	9/19/2012 12:00:00 AM	Approved
View	Edit	Copy	Recertify	CH373750	Catch Basin Cleanout Waste	CNOS	10/20/2012 12:00:00 AM	Approved
View	Edit	Copy	Recertify	CH474943	CPU's, LAPTOP COMPUTERS AND CIRCUT BOARDS FOR RECLAMATION	EEE3	11/15/2012 12:00:00 AM	Approved
View	Edit	Copy	Recertify	CH474961	crushed fluorescent bulbs for recycle	CFL9	11/16/2012 12:00:00 AM	Approved
View	Edit	Copy	Recertify	CH474935	EQUIPMENT FOR DISMANTLING	EEE	10/24/2012 12:00:00 AM	Approved
View	Edit	Copy	Recertify	CH474963	FLUORESCENT LIGHT BULBS (4 and 8ft Tubes)	CFL1	11/16/2012 12:00:00 AM	Approved
View	Edit	Copy	Recertify	CH394085	Instapak-50W Component "B"	FB2	9/17/2010 12:00:00 AM	Expired
View	Edit	Copy	Recertify	DS-BGB-PE3092	Intact Lithium-Plant shipments	LBRR	1/25/2013 12:00:00 AM	Approved
View	Edit	Copy	Recertify	CH474946	Lead Acid Batteries For Reclamation	LBLA	11/16/2012 12:00:00 AM	Approved
View	Edit	Copy	Recertify	CH474948	Lithium Batteries For Incineration	LBR	11/8/2011 12:00:00 AM	Deadfiled
View	Edit	Copy	Recertify	CH485998	METAL HALIDE, SHATTERSHIELD, HID BULBS	CFL4	1/24/2013 12:00:00 AM	Approved
View	Edit	Copy	Recertify	CH327237	METHYLENE CHLORIDE (DICHLOROMETHANE)	A11	8/28/2008 12:00:00 AM	Tentative
View	Edit	Copy	Recertify	CH474956	Ni-Cad Batteries Wet Or Dry For Reclamation	LBD2	11/16/2012 12:00:00 AM	Approved
View	Edit	Copy	Recertify	CH474982	NON-PCB BALLASTS	D80L	11/16/2012 12:00:00 AM	Approved
View	Edit	Copy	Recertify	CH485994	ODD SHAPED FLUORESCENT/INCANDESCENT BULBS	CFL2	1/24/2013 12:00:00 AM	Approved
View	Edit	Copy	Recertify	CH326942	oil & coolant mixture (Brass)	A22K	9/19/2012 12:00:00 AM	Approved
View	Edit	Copy	Recertify	CH327231	oil & coolant mixture (iron - steel)	CNOS	9/19/2012 12:00:00 AM	Approved
View	Edit	Copy	Recertify	CH327243	OILY ABSORBENTS CONTAMINATED WITH COOLANT, OIL	FB5	9/19/2012 12:00:00 AM	Approved
View	Edit	Copy	Recertify	CH474979	RCRA Empty Drums	D23	11/16/2012 12:00:00 AM	Approved

CH531136 FRIG AND AIR COND EEE5

A-4

Sue received 9/12/12

Client:	Environmental Solutions, Inc.	Laboratory:	Braun Intertec Corporation
Log-in:	98-3499	Lab Contact/Phone:	D. Almquist/612-942-4936
Project Number:	CVXX-98-014A	Sampler:	Client
PO Number:		% Moisture:	Not Applicable
Client Reference:	Fleck Controls	MDL:	Method Detection Limit
Matrix:	Solid	RL:	Reporting Limit
Lab Sample ID:	98-3499-01		

Date Sampled: 05/04/98
Date Received: 05/05/98
Date Reported: 05/13/98

Page: 1

Client Sample ID/Description: Used Sorbents

Compound	Extract Method	Extract Date	Analysis Method	Analysis Date	Dilution Factor	MDL	RL	Sample Result			REG LIMS
Metals, TCLP											
Arsenic, Total	-	-	SW-846 6010	05/12/98	1.0	37	110	<110	ug/l	.11 PPM	5.0
Barium, Total	-	-	SW-846 6010	05/12/98	1.0	1.0	10	160	ug/l	.16 PPM	100
Cadmium, Total	-	-	SW-846 6010	05/12/98	1.0	2.0	10	22	ug/l	.022 PPM	1.0
Chromium, Total	-	-	SW-846 6010	05/12/98	1.0	1.7	10	<10	ug/l	.01 PPM	5.0
Lead, Total	-	-	SW-846 6010	05/12/98	1.0	13	40	6100	ug/l	6.1 PPM	5.0
Mercury, Total	-	-	SW-846 7471	05/12/98	1.0	0.1	0.3	<0.3	ug/l	.0003 PPM	.2
Selenium, Total	-	-	SW-846 6010	05/12/98	1.0	36	110	<110	ug/l	.11 PPM	1.0
Silver, Total	-	-	SW-846 6010	05/12/98	1.0	2.0	10	<10	ug/l	.01 PPM	5.0
Metal, TCLP Matrix Spike											
Arsenic	-	-	SW-846 6010	05/12/98	1.0	-	-	108	% rec		
Barium	-	-	SW-846 6010	05/12/98	1.0	-	-	96	% rec		
Cadmium	-	-	SW-846 6010	05/12/98	1.0	-	-	86	% rec		
Chromium	-	-	SW-846 6010	05/12/98	1.0	-	-	95	% rec		
Lead	-	-	SW-846 6010	05/12/98	1.0	-	-	90	% rec		
Mercury	-	-	SW-846 7470	05/12/98	1.0	-	-	102	% rec		
Selenium	-	-	SW-846 6010	05/12/98	1.0	-	-	103	% rec		
Silver	-	-	SW-846 6010	05/12/98	1.0	-	-	58	% rec		

P/BILLION TESTING DONE

(End of Report)

SRB rec'd
9/12/12

TestAmerica
ANALYTICAL TESTING CORPORATION
602 Commerce Drive Watertown, WI 53094 * 800-833-7036 * Fax 920-261-8120

August 02, 2007

Client:	EOG Environmental, Inc. 8111 W. Bradley Rd. Milwaukee, WI 53223	Work Order: Project Name: Project Number:	WQG0821 TCLP Metals Pentair
Attn:	Accounts Payable	Date Received:	07/24/07

An executed copy of the chain of custody is also included as an addendum to this report.

If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-833-7036

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
Pentair	WQG0821-01	05/20/07

Samples were received into laboratory at a temperature of 18 °C.

Wisconsin Certification Number: 128053530

The Chain of Custody, 1 page, is included and is an integral part of this report.

Unless subcontracted, volatiles analyses (including VOC, PVOC, GRO, BTEX, and TPH gasoline) performed by TestAmerica Watertown at 1101 Industrial Drive, Units 9&10. All other analyses performed at the address shown in the heading of this report.

Approved By:

Brian DeJong

TestAmerica - Watertown, WI
Brian DeJong For Traci Saeger
Project Manager

A-7

TestAmerica
ANALYTICAL TESTING CORPORATION
602 Commerce Drive Watertown, WI 53094 * 800-833-7036 * Fax 920-261-8120

EOG Environmental, Inc.
8111 W. Bradley Rd.
Milwaukee, WI 53223
Accounts Payable

Work Order: WQG0821
Project: TCLP Metals
Project Number: Pentair

Received: 07/24/07
Reported: 08/02/07 14:52

ANALYTICAL REPORT

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WQG0821-01 (Pentair - Misc. Liquid)						**Sampled: 05/20/07**			
General Chemistry Parameters									
Flashpoint	**>200**		°F	NA	1	07/31/07 12:18	jej	7070802	SW 1010
TCLP Metals									
Arsenic	<3.6		mg/L	0.18	20	08/01/07 09:22	gaf	7070798	SW 6010B
Barium	**0.68**		mg/L	0.0100	20	08/01/07 09:22	gaf	7070798	SW 6010B
Cadmium	**0.45**		mg/L	0.0100	20	08/01/07 09:22	gaf	7070798	SW 6010B
Chromium	<0.40		mg/L	0.020	20	08/01/07 09:22	gaf	7070798	SW 6010B
Lead	**49**		mg/L	0.10	20	08/01/07 09:22	gaf	7070798	SW 6010B
Mercury	<0.0010		mg/L	0.0010	1	08/02/07 13:11	tdc	7080054	SW 7470A
Selenium	<3.2		mg/L	0.16	20	08/01/07 09:22	gaf	7070798	SW 6010B
Silver	<0.40		mg/L	0.020	20	08/01/07 09:22	gaf	7070798	SW 6010B
Extraction	**Yes**		YesNo	NA	1	07/31/07 10:37	jej	7070800	SW 1311

TestAmerica
ANALYTICAL TESTING CORPORATION
602 Commerce Drive Watertown, WI 53094 * 800-833-7036 * Fax 920-261-8120

EOG Environmental, Inc.
8111 W. Bradley Rd.
Milwaukee, WI 53223
Accounts Payable

Work Order: WQG0821
Project: TCLP Metals
Project Number: Pentair

Received: 07/24/07
Reported: 08/02/07 14:52

LABORATORY BLANK QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
TCLP Metals														
Arsenic	7070798			mg/L	N/A	0.18	<0.18							
Barium	7070798			mg/L	N/A	0.010	<0.010							
Cadmium	7070798			mg/L	N/A	0.010	<0.010							
Chromium	7070798			mg/L	N/A	0.020	<0.020							
Lead	7070798			mg/L	N/A	0.10	<0.10							
Selenium	7070798			mg/L	N/A	0.16	<0.16							
Silver	7070798			mg/L	N/A	0.020	<0.020							
Mercury	7080054			mg/L	N/A	0.000090	<0.000090							

TestAmerica
ANALYTICAL TESTING CORPORATION
602 Commerce Drive Watertown, WI 53094 * 800-833-7036 * Fax 920-261-8120

EOG Environmental, Inc.
8111 W. Bradley Rd.
Milwaukee, WI 53223
Accounts Payable

Work Order: WQG0821
Project: TCLP Metals
Project Number: Pentair

Received: 07/24/07
Reported: 08/02/07 14:52

CCV QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
TCLP Metals														
Barium	7H01006		5.0000	mg/L	N/A	N/A	4.97		99		90-110			
Silver	7H01006		1.0000	mg/L	N/A	N/A	0.989		99		90-110			
Arsenic	7H01006		5.0000	mg/L	N/A	N/A	4.90		98		90-110			
Cadmium	7H01006		5.0000	mg/L	N/A	N/A	4.84		97		90-110			
Chromium	7H01006		5.0000	mg/L	N/A	N/A	4.84		97		90-110			
Lead	7H01006		5.0000	mg/L	N/A	N/A	4.82		96		90-110			
Selenium	7H01006		5.0000	mg/L	N/A	N/A	4.91		98		90-110			
Barium	7H01006		5.0000	mg/L	N/A	N/A	4.93		99		90-110			
Silver	7H01006		1.0000	mg/L	N/A	N/A	0.982		98		90-110			
Arsenic	7H01006		5.0000	mg/L	N/A	N/A	4.88		98		90-110			
Cadmium	7H01006		5.0000	mg/L	N/A	N/A	4.78		96		90-110			
Chromium	7H01006		5.0000	mg/L	N/A	N/A	4.81		96		90-110			
Lead	7H01006		5.0000	mg/L	N/A	N/A	4.79		96		90-110			
Selenium	7H01006		5.0000	mg/L	N/A	N/A	4.86		97		90-110			
Mercury	7H02016		5.0000	mg/L	N/A	N/A	5.10		102		90-110			
Mercury	7H02016		5.0000	mg/L	N/A	N/A	5.08		102		90-110			
Mercury	7H02016		5.0000	mg/L	N/A	N/A	5.05		101		90-110			

TestAmerica
ANALYTICAL TESTING CORPORATION
602 Commerce Drive Watertown, WI 53094 * 800-833-7036 * Fax 920-261-8120

EOG Environmental, Inc.
8111 W. Bradley Rd.
Milwaukee, WI 53223
Accounts Payable

Work Order: WQG0821
Project: TCLP Metals
Project Number: Pentair

Received: 07/24/07
Reported: 08/02/07 14:52

LABORATORY DUPLICATE QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
General Chemistry Parameters													
QC Source Sample: WQG0708-01													
Flashpoint	7070802	113		°F	N/A	N/A	115				2	200	
QC Source Sample: WQG0708-04													
Flashpoint	7070802	122		°F	N/A	N/A	124				2	200	
QC Source Sample: WQG0770-01													
Flashpoint	7070802	131		°F	N/A	N/A	133				2	200	
TCLP Metals													
QC Source Sample: WQG0970-01													
Arsenic	7070798	<0.18		mg/L	N/A	0.18	<0.18					20	
Barium	7070798	0.0180		mg/L	N/A	0.010	0.0182				1	20	
Cadmium	7070798	0.00364		mg/L	N/A	0.010	0.00460				23	20	R4
Chromium	7070798	<0.020		mg/L	N/A	0.020	<0.020					20	
Lead	7070798	<0.10		mg/L	N/A	0.10	<0.10					20	
Selenium	7070798	<0.16		mg/L	N/A	0.16	<0.16					20	
Silver	7070798	0.0186		mg/L	N/A	0.020	0.0171				9	20	

TestAmerica
ANALYTICAL TESTING CORPORATION
602 Commerce Drive Watertown, WI 53094 * 800-833-7036 * Fax 920-261-8120

EOG Environmental, Inc.
8111 W. Bradley Rd.
Milwaukee, WI 53223
Accounts Payable

Work Order: WQG0821
Project: TCLP Metals
Project Number: Pentair

Received: 07/24/07
Reported: 08/02/07 14:52

LCS/LCS DUPLICATE QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
TCLP Metals														
Arsenic	7070798		2.0000	mg/L	N/A	0.18	1.87		94		85-112			
Barium	7070798		1.0000	mg/L	N/A	0.010	0.919		92		78-110			
Cadmium	7070798		1.0000	mg/L	N/A	0.010	0.941		94		83-109			
Chromium	7070798		1.0000	mg/L	N/A	0.020	0.950		95		84-110			
Lead	7070798		2.0000	mg/L	N/A	0.10	1.89		95		84-110			
Selenium	7070798		4.0000	mg/L	N/A	0.16	3.77		94		84-110			
Silver	7070798		1.0000	mg/L	N/A	0.020	1.01		101		80-123			
Mercury	7080054		0.0025 000	mg/L	N/A	0.000090	0.00227		91		85-115			